Notulae de Hepaticis Japonicis (IV).

auctore S. HATTORI.

服部新佐: 日本産苔類雜記 (其四)

35) **Leptocolea Horikawana** S. HATTORI, sp. nov. (Fig. 14).

Sterilis; corticola, viridescens, mediocris. Caulis repens, 10–12 mm longus, 0.1 mm in diametro, cum foliis 1.5 mm latus, paululo ramosus. Folia caulina laxe imbricata, explanata sub angulo 60° patula, ad 0.9 mm longa et 0.55 mm lata, brevissime inserta, oblongo-ovata, basi antica caulem tegentia, margine antico arcuato, postico subrecto, apice late obtusa, indistincte denticulata. Cellulae hexagonae, marginales parum prominulae, apicales ca. 18μ in diametro, mediae $25 \times 35\mu$, basales elongatae, $28 \times 50\mu$, trigonis parvis. Lobulus ovatus, inflatus, 0.35 mm longus, 0.2 mm latus, carina curvata, stricte in folii marginem excurrente, apice planus, recte truncatus, angulo dentè validiore, multicellulari spinato, dente altero (inferiore) sat approximato brevissimo unicellulari acuto, incurvato. Stylus pro genere maximus, elongatus, 0.26–0.29 mm (8–9 cellul.) longus, 0.035–0.048 mm (2–3 cellul.) latus. Reliqua desunt.

Nom. Jap. *Horikawa-kiraragoke* (nom. nov.).

Hab. in Kyûsyû. Prov. Ôsumi: ins. Yakusima, Ambo—Onoaida (S. HATTORI, no. 6717—Typus, no. 6709, 22. Sept. 1940), Onoaida (S. HATTORI, no. 7094, 23. Sept. 1940), Ambô (S. HATTORI, no. 7961a, 28. Sept. 1940); Tasiro-mura, Utinomaki (S. HATTORI, no. 1941, 13. Apr. 1939), Sata-mura, Hetuka (S. HATTORI, no. 2352, no. 2384, 17. Apr. 1939). Planta corticola, raro foliicola (no. 1941).

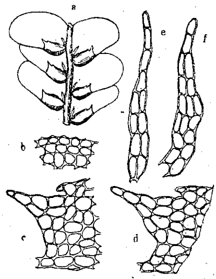


Fig. 14. *Leptocolea Horikawana* S. HATTORI.
a. Part of stem, postical view (×9).
b. Cells from antical margin of lobe (×75).
c, d. Apices of lobules (×75).
e, f. Styli (×75).

Very closely related to *Leptocolea dolichostyla* HERZOG (in HANDEL-MAZZETTI, Symbolae Sinicae V, 54. 1930), but with some clear distinctions. The new species differs from *L. dolichostyla* in the shape of

the lobule and especially in its larger apical tooth. The more distinct character, however, which distinguishes the present species from *L. dolichostyla* is the multicellular stylus, perhaps one of the largest found in *Leptocolea*.

36) **Leptocolea boninensis** S. HATTORI, sp. nov. (Fig. 15).

Sterilis, propagulifera; corticola, pusilla, luride virens. Caulis ad 12 mm longus, cum foliis 1.2 mm latus, 0.08 mm in diametro, prostratus, breviter ramosus, rhizoidibus discoideo-fasciculatis affixus. Folia caulina parum tegentia, angulo ca. 70° patentia, plano-disticha, angustissime inserta, subsymmetrica, falcato-oblonga, leviter obovata, 0.67 mm longa, 0.47 mm lata, basi antica rotundata, caulem superante, margine hyalino-limbata, integra. Cellulae limbales radialiter elongatae, 16–30μ longae, 10–12μ latae, supernae 16×18μ, mediae 22×26μ, basales 18×30–40μ, trigonis et nodulosis intermediis parvis sed claris; ocellus nullus. Lobulus magnus, folio subtriplo brevior, 0.23 mm longus, 0.16 mm latus, late oblongus, inflatus, apice quam basis subtriplo latior, subrecte truncatus, bidentatus, dente angulari uni- vel bicellulari, spinoso, mediano bi- (raro 3- vel 4-) cellulari, cellula apicali papilla hyalina in sinum interdentalem nutante notato, carina arcuata, sinu amplo in folii marginem excurrente. Stylus elongatus, 5- vel 6-cellularis, saepius deletus. Gemmae disciformes, in facie folii postici positae. Cetera desunt.

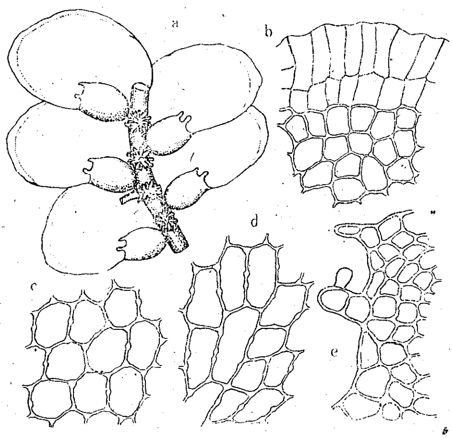


Fig. 15. *Leptocolea boninensis* S. HATTORI.
a. Part of stem, postical view (×30).
b. Cells from apex of lobe (×230).
c. Cells from middle of lobe (×230).
d. Cells from base of lobe (×230).
e. Apex of lobule (×230).

Nom. Jap. *Munin-kiraragoke* (nom. nov.).

Hab. ins. Bonin: Hahazima (S. HATTORI, no. 3179—Typus, no. 3197, Jun. 1938).

The present species, although closely allied to *Leptocolea Verdoornii* HERZOG (in Ann. Bryol. V, 97. 1932), may be easily distinguished from it by its shape of leaves and lobules and its longer stylus.

37) **Leptocolea lanciloba** (STEPHANI) EVANS in Torrey Bot. Club. XXXVIII, 286 (1911); STEPHANI, Spec. Hepat. V, 852 (1916).

Cololejeunea lanciloba STEPHANI in Hedwigia XXXIV, 250 (1895); EVANS in Trans. Conn. Acad. X, 452, Pl. 50, figs. 1–7 (1900).

var. **yakusimensis** S. HATTORI, var. nov. (Fig. 16).

A typo recedit, planta robusta, foliis caulinis majoribus, lobulis latioribus, valde irregularibus, cellulis foliorum majoribus.

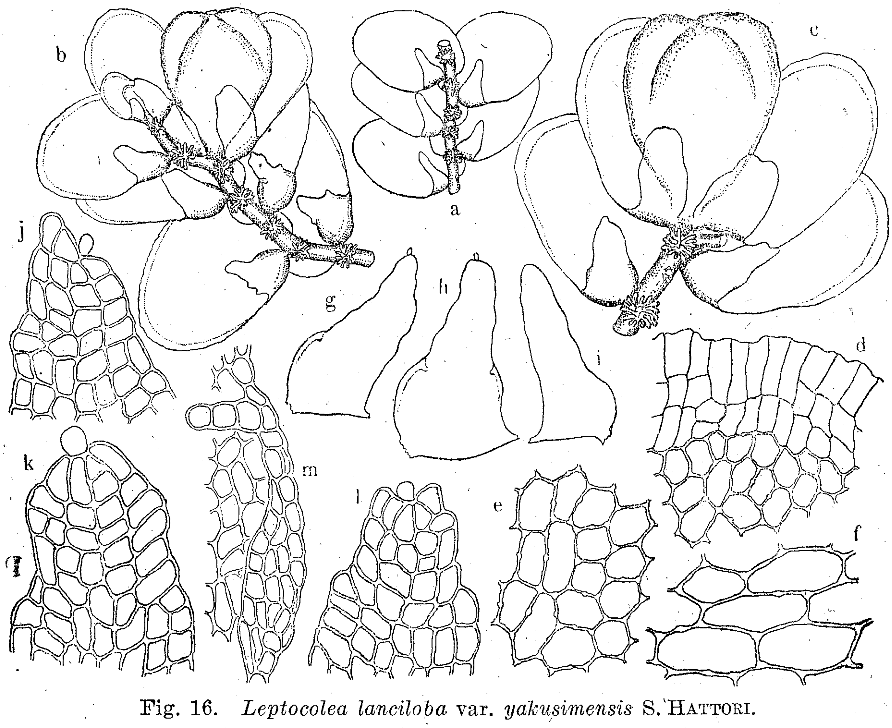


Fig. 16. *Leptocolea lanciloba* var. *yakusimensis* S. HATTORI.
a. Part of stem, postical view (×13). *b, c.* Parts of plant, each with an female inflorescence (×30). *d.* Cells from apex of lobe (×230). *e.* Cells from middle of lobe (×230). *f.* Cells from base of lobe (×230). *g–i.* Lobules dissected from leaves (×60). *j–l.* Apices of lobules (×230). *m.* Involute margin with a tooth, from the middle part of lobule (×230).

Monoica; major, pallide virens, in foliis vivis arcte repens. Caulis ad 15 mm longus, cum foliis 2 mm latus, ca. 0.1 mm in diametro, irregulariter ramosus, rhizoidium fasculis affixus. Folia caulina parum imbricata, plano-disticha, sub angulo ca. 60° patula, brevissime inserta, late oblonga, 1–1.2 mm longa, 0.7–0.8 mm lata, apice rotundata, basi dorsali late rotundata, caulem superantia, margine integra, latiuscule hyalino-limbata. Cellulae limbales radialiter elongatae, supernae $16 \times 18\mu$, mediae $24 \times 38\mu$, basales 26×48–54μ metientes, trigonis nullis vel parvis, nodulosis intermediis distinctis; ocellus nullus. Lobulus planus, oblique obcuneatus, lanceolatus, ab carina angusta erecto-patens, 0.4–0.5 mm longus, basi inflatus, 0.25 mm latus, apice subacutus, obtusiusculus vel anguste emarginatus, irregularis, margine integer, leviter repandus, dentibus parvis saepe involutis armatus (fig. 16, m), carina stricta vel parum arcuata. Stylus minutissimus, unicellularis, saepius mox deletus. Perianthia uno latere innovata, late obcordata, complanata, 0.8 mm longa, 0.7 mm lata, apice truncata vel paululo retusa, plicis ventralibus divergentibus, in unam latam confluentibus, plicis dorsalibus obsoletis, rostro brevi valido. Folia floralia elliptica, 1.1 mm longa, 0.65 mm lata, apice late obtusa, limbo hyalino ornata; lobulus longe ligulatus, duplo longior quam latus, profunde solutus, apice obtusus, truncatus vel emarginatus, margine integer vel leviter repandus. Androecia (juvencula) in ramis terminalia, pro planta exigua, bracteis paucijugis.

Nom. Jap. *Ô-yôzyôgoke* (nom. nov.).

Hab. in Kyûsyû. Prov. Ôsumi: ins. Yakusima, Kosugidani (S. HATTORI, no. 7215—Typus, no. 7236, no. 7378, no. 7381, no. 8329, no. 8333, 25. Sept. 1940), Kosugidani-Hananoegô (S. HATTORI, no. 7456, 26. Sept. 1940; no. 7826, no. 7834, no. 7844, no. 7853, no. 7879, no. 7890c, 27. Sept. 1940). Planta foliicola.

38) **Leptocolea japonica** SCHIFFNER in Ann. Bryol. II, 92, Fig. 3, 4 (1929).

Nom. Jap. *Yamato-yôzyôgoke* (nom. nov.).

Hab. in Kyûsyû. Prov. Hyûga: Miyazaki-si, Hitotuba (S. HATTORI, no. 3266, 26. Mai. 1940); Minaminaka-gun, Obi-mati (S. HATTORI, no. 6321, 16.

Sept. 1940; no. 6684, 19. Sept. 1940). Planta corticola vel foliicola.

Distr. Japonia (Honsyû, Sikoku).

39) **Leptocolea longilobula** HORIKAWA in Journ. Sci. Hiroshima Univ. Ser. B, Div. 2, Vol. I, 73, Text-fig. 10 (1931).

Nom. Jap. *Naga-sitaba-yôzyôgoke* (HORIKAWA).

Hab. in Kyûsyû. Prov. Hyûga: Minaminaka-gun, Kitagô-mura (S. HATTORI, no. 2805, no. 2806, 23. Aug. 1939), Obi-mati (S. HATTORI, no. 6687a, 19. Sept. 1940).

Sikoku. Prov. Tosa: m. Hônokawa-yama (S. HATTORI, no. 6128, 31. Jul. 1940).

Ins. Bonin: Titi-zima (S. HATTORI, no. 3149, Jun. 1938), Haha-zima (S. HATTORI, no. 3177, no. 3186, no. 3187, no. 3207, Jun. 1938). Planta corticola vel epiphylla, sed saepe submersa!

Distr. Japonia (Honsyû, Sikoku, ins. Torisima, Ryûkyû, Formosa et ins. Querpaert).

40) **Leptocolea aoshimensis** HORIKAWA, l. c. Vol. I, 20, Text-fig. 5 (1931).

Nom. Jap. *Aosima-yôzyôgoke* (HORIKAWA).

Hab. in Kyûsyû. Prov. Ôsumi: Utinoura-tyô, m. Kunimi-yama (S. HATTORI, no. 1824, Mar. 1939). Prov. Ryûkyû: Okinawa, m. Yonaha-dake (Y. KIMURA et I. HURUSAWA, no. 8433, 17. Sept. 1940). Foliicola et corticola.

Distr. Japonia (Kyûsyû, ins. Yakusima, ins. Ryûkyû, Formosa et ins. Quelpaert).

41) **Leptocolea Goebelii** (GOTTSCHE msc.) STEPHANI, Spec. Hepat. V, 850 (1916).

Nom. Jap. *Yôzyô-goke* (IHSIBA).

Hab. in Kyûsyû. Prov. Ôsumi: in monte Kirisima (S. HATTORI, no. 239, 17. Aug. 1938); Utinoura-tyô, m. Kunimi-yama (S. HATTORI, no. 1150, no. 1186, no. 1207, no. 1215, no. 2019, 25. Mar. 1939); Tasiro-mura, Utinomaki (S. HATTORI, no. 1436, no. 1472, 2. Apr. 1939), Hanase (S. HATTORI, no. 1951, 19. Apr. 1939); in monte Takakuma-yama (S. HATTORI, no. 1660, no. 1661,

11. Apr. 1939); ins. Yakusima, Kosugi-dani (S. HATTORI, no. 7205, no. 7256, no. 7400, no. 8304, no. 8310, 25. Sept. 1940). Prov. Hyûga: Minaminaka-gun, Sakatani-mura (S. HATTORI, no. 2634, no. 2636, no. 2637, no. 2638, no. 2639, no. 2640, no. 2641, no. 2740, 12. Aug. 1939), in monte Komatu-yama (S. HATTORI, no. 6469, no. 6609a, no. 6637, no. 6655, 18. Sept. 1940). Foliicola et corticola.

Distr. Java, ins. Penang et Japonia (Honsyû, Sikoku, Kyûsyû, ins. Yakusima, ins. Ryûkyû, Formosa et ins. Botel Tobago).

42) **Leptocolea Nakaii** HORIKAWA, l. c. Vol. I, 18, Text-fig. 4 (1931).

Nom. Jap. *Nakai-kiraragoke* (nom. nov.).

Hab. in Kyûsyû. Prov. Ôsumi: Utinoura-tyô, m. Kunimi-yama (S. HATTORI, no. 2006, Mar. 1939); ins. Yakusima, Kosugi-dani (S. HATTORI, no. 7236a, 25. Sept. 1940). Prov. Hyûga: Minaminaka-gun, Kitagô-mura (S. HATTORI, 1938).

Distr. Japonia (ins. Bonin, Ryûkyû, Formosa et Sikoku).

本號ニ於テハ邦産えふじやうどけ (*Leptocolea*) 屬若干ヲ報告スル。現在同屬ニ籍ヲ有スル種デハ A. W. EVANS 氏ガ 1906 年ニ *Cololejeunea Goebelii* SCHIFFN. トシテ報告シタノガ日本ヨリノ最初ノ記錄デアラウ (Proc. Wash. Acad. Sci. VIII, p. 146)。次イデ H. MOLISCH 教授ノ宮島ニ於ケル採品ニ基イテ V. SCHIFFNER 氏ハ 1929 年ニ *Leptocolea japonica* SCHIFFN. ヲ記載シタ (Ann. Bryol. II, p. 92)。其後廣島ノ堀川教授ハ 1932–1934 年ニカケテ續々ト新種ヲ發表サレ遂ニ 14 種ヲ追加サレタ (Journ. Sci. Hiroshima Univ. Ser. B, Div. 2, I–II)。其ノ中 4 種ハ現在 *Taeniolejeunea* ヘ移サレテ居ル。最近筆者ハ本誌上及ビ其他ニ於テ邦産同屬ニ 1 種 1 變種ヲ加ヘタガ、今回 3 種ヲ追加シ結局我國ニ産スル同屬ハ計 16 種 1 變種ニ達スル事トナツタ。其ノ中デ *Leptocolea pseudogoebelii* HORIKAWA ハ筆者ハ未ダ實物ニ接シナイガ、東亜諸域ニ廣ク分布シ多クノ變種ヲ持ツ非常ニ多型的ナ *L. Goebelii* STEPH. ノ極端ニ弱小ナル一型トシテ同種ノ限界內ニ入ル可能性ガアル。又 *L. microlejeuneoides* HORIKAWA ハ記載文及ビ圖ヨリ判斷スレバ、本屬ヨリ寧ロ *Cololejeunea* ニ近イヤウデアル。依ツテ次ニ述ベル Key ヨリハ上述ノ 2 種ヲ除イタ。

日本産 *Leptocolea* 屬ニ對スル Key

1 ┌ 葉緣ハ 2〜4 層ノ透明ナル細胞ニ依ツテ緣取ラレル (Fig. 15. *a*, *b*. 及ビ Fig. 16. *c*, *d*. ヲ見ヨ. *a*, *c* ニ於ケル點線ハソノ境界ヲ示ス) . . . . (2)
　└ 葉緣ニハカヽル細胞ノ分化ナシ . . . . (8)

2 透明細胞層ノ幅ハ 1〜2 細胞ニ過キズ; 葉ノ下片ハ非常ニ小サク形ハ廣三角狀ナリ .... *L. minutilobula* HORIK.
透明細胞層ノ幅ハ 2〜4 細胞; 葉ノ下片ハ上種ノ如ク小サクハナイ .... (3)

3 植物ハ中〜大形; 葉ノ下片ハ平ラナ三角形・披針形・橢圓形ナルカ或ハ膨レタ卵形ニシテ中形ナリ(卵形ニシテ膨レタ場合モ長サハ葉ノ 1/3 カ或ハソレ以下デアル); 柱狀細胞 (stylus) ハ微小ニシテ 1〜2 細胞ヨリ成ルニ過キズ .... (4)
植物ハ小〜中形; 葉ノ下片ハ大形ニシテ長サハ葉ノ 1/3〜1/2 ニ達シ卵狀ヲナシテ膨レル; 柱狀細胞ハ長ク 4〜6 細胞ヨリ成ル .... (7)

4 葉ノ下片ハ平面ニシテ狹イ直線狀ノ稜 (carina) ヨリ直立セル橢圓形ヲナス .... *L. aoshimensis* HORIK.
葉ノ下片ハ略〻平面ナルモ基部ニ於テ膨レ, 稜ヲ底トスル三角形或ハ披針形ニシテ屢〻緣邊ニ不規則ナル齒牙ヲ備ヘル .... (5)
葉ノ下片ハ直立セズ膨レタ卵形ヲナシ, 頂端ハ截形ニシテ 2 齒牙ヲ有スル .... (6)

5 葉ノ下片ハ廣三角形, 長サハ幅ヨリ短カシ .... *L. Nakaii* HORIK.
葉ノ下片ハ不規則ナル披針形或ハ長三角形, 長サハ必ズ幅ヨリ長ク約 2 倍ニ達スルノガ一般デアル .... *L. lanciloba* var. *yakusimensis* S. HATT.

6 雌雄異株; 植物ハ中形; 葉ノ下片ノ齒牙ハ强大ニシテ, 角隅ノ齒ハ 2〜4 細胞、中央ノ齒ハ 6〜8 細胞ヨリ成ル .... *L. miyajimensis* HORIK.
雌雄同株; 植物ハ大形; 葉ノ下片ノ齒牙ハ前者ニ比スレバ弱少ニシテ角隅ノ齒ハ 2 細胞, 中央ノ齒ハ 2〜4 細胞ヨリ成ル .. *L. miyajimensis* var. *microdentata* S. HATT.

7 植物ハ小形 (長サ 4 mm, 幅ハ 1 mm 以內); 葉ノ下片ハ大ニシテ長サハ葉ノ 1/2 ニ達スル .... *L. liukiuensis* HORIK.
植物ハ中形 (長サ約 10 mm, 幅ハ約 1.2 mm); 葉ノ下片ハ長サ葉ノ 1/3 ナリ .... *L. boninensis* S. HATT.

8 葉細胞ハ纖維組織狀デ甚ダ特異デアル; 葉ノ下片ハ小形ナルモ長大ナル一棘 (cilia) ヲ備フ; 常ニ羊齒類・灌木等ノ生葉上ニ着生スル .... *L. ciliatilobula* HORIK.
葉細胞ハ普通ナリ; 葉ノ下片ハ中〜大形ニシテ前種ノ如キ長大ナル棘ヲ備ヘズ; 生葉上、樹皮上及ビ濕岩上ニ着生スル .... (9)

9 植物ハ小形; 葉ノ下片ハ小〜中形デ非常ニ變化スル; 花被ハ扁平ナラズ (*Cololejeunea* ニ近シ); 本州・四國・九州ニ分布シ, 比較的人煙ニ近キ海岸或ハ其レニ接スル地域ノ樹皮又ハ生葉上ニ着生スル .... *L. japonica* SCHIFFN.
植物ハ中〜大形; 葉ノ下片ハ中〜大形デ上種ノ如ク不規則ナラズ; 花被ハ扁平ナリ .... (10)

10 葉緣ハ全邊ナリ .... (11)
葉緣ハ密ニ微小鋸齒アリ (Fig. 14. b 參照) .... (12)

11 葉ノ下片ハ平面ニシテ直立セル舌狀ヲナス; 柱狀細胞ナシ; 樹皮・濕岩・生葉上ニ着生 .... *L. longilobula* HORIK.
葉ノ下片ハ大形, 長サハ葉ノ 1/2 ニシテ膨レ, 形ハ卵狀ニシテ *L. Horikawana* ニ似

ルモ角隅ノ齒牙ナシ; 柱狀細胞ハ非常ニ大 (幅ハ 2 細胞,長サハ數細胞); 濕岩稀ニ生葉上ニ着生，琉球及ビ臺灣ニ分布 .... *L. magnistyla* HORIK.

12 葉ノ下片頂端ノ 2 齒牙ハ略〻同大ニシテ 2 細胞ヨリ成ル; 柱狀細胞ハ小〜中形デ 2〜3 (稀ニ 4) 細胞ヨリ成ル .... *L. Goebelii* STEPH.
葉ノ下片頂端ノ 2 齒牙ハ不同ニシテ角隅ノ齒ハ短小，1 細胞ヨリ成ルモ中央ノ齒ハ强大ニシテ 4〜5 細胞或ハソレ以上; 柱狀細胞ハ長大ニシテ長サハ 4〜9 細胞ニ達スル .... (13)

13 葉ノ下片頂端ノ中央齒ハ强大; 柱狀細胞ハ非常ニ大キク長サ 8〜9 細胞，幅ハ 2〜3 細胞 (Fig. 14. *c, d*); 樹皮稀ニ生葉上ニ着生 .... *L. Horikawana* S. HATT.
葉ノ下片頂端ノ中央齒ハ前者ニ比スレバ稍〻弱小; 柱狀細胞ハ長サ 4〜6 細胞，幅ハ 1 細胞; 生葉上ニ着生 .... *L. dolichostyla* HERZ.

35) **ほりかはきららごけ** (新稱) ハ南日本ノ苔類フロラヲ明カニセラレタ堀川芳雄敎授ノ功績ヲ記念シタモノデアル。*L. dolichostyla* HERZ. ニ最モ近イ種デアル (ソノ區別ハ Key ヲ參照セラレタイ)。又一見 *L. magnistyla* HORIKAWA ニ類似スルモ後者ハ葉緣全邊ニシテ葉ノ下片ハ長サ葉ノ 1/2 ニ達シ角隅ノ齒ヲ缺ク等確然トシテ區別シ得ル。

36) **むにんきららごけ** (新稱) ハ小笠原島ニ產シ、樹皮ニ着生シテ一見雲母ノ細片ノ如キ感アルヲ以ツテ名付ケタモノデアル。日本產同屬デハ *L. liukiuensis* HORIKAWA ニ稍〻近イモノト思ハレル。

37) **おほえふじやうごけ** (新稱) ハ *L. lanciloba* EVANS ノ變種デアツテ、基本種ヨリ强大デ葉モ大キク、殊ニ葉ノ下片ハ非常ニ不規則デ兩側部ハ內ヘ卷キ込ンダリスル (Fig. 16. *b, g–m* 參照)。葉細胞モ亦大キイ。屋久島ニ產シ、生葉上ニ着生スル。因ニ基本種ハ南支、ハワイ及ビニコバル諸島ニ分布スル。

38) **やまとえふじやうごけ** (新稱) ハ九州ヨリ初メテノ報告デアル。其ノ他 Key ヲ參照サレタイ。

39) **ながしたばえふじやうごけ** ハ九州，小笠原島ヨリ最初ノ記錄デアル。興味アル點ハ生葉上又ハ樹皮上ニ着生スル外、屢〻濕岩又ハ流水下ノ岩上ニ着生スル事デアル。カヽル水中ニ生育スル植物ハ比較的大形デ綠色、葉ノ下片ハ完全ナ舌狀楕圓形全邊デ決シテ鋸齒ヲ生ジナイヤウデアル。

40) **あをしまえふじやうごけ**。

41) **えふじやうごけ**。

42) **なかいきららごけ** (新稱) ハ初メ堀川敎授ニ依ツテ小笠原ヨリ報告サレタガ、其後琉球・臺灣及ビ四國ニモ知ラレタ。九州ヨリハ初メテノ記錄デアル。和名ハ種名ヨリ採ツタ。きららハ雲母デアル。